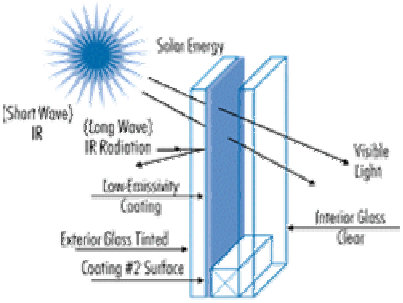

Open Office Floor Plan – Lighting

Location: 3rd Floor – southeast building corner.

Design Intent: Daylighting strategies complemented by high-efficiency lighting with 0.9 watts per square foot of energy usage and a minimum of 30 foot candles at the work surfaces.

Lighting provides a strong example of how building systems can be integrated to maximize individual qualities into a whole-building design.

Daylighting Strategies.

- Early in the bridging phase, a commissioned study investigated several types of glass and glazing systems. The exterior glazing was selected for its ability to maximize the admission of daylight, insulate against Sacramento's intense summer heat, and keep the cold on the outside in winter. Low-E coatings on tinted glass play an important role in thermal performance by possessing high-visible light transmission and low heat transfer properties. Furthermore, Low-E coatings on tinted glass reduce glare, which was important to the project's neighbors.
- Suspended lighting and ceiling tiles.
- As the daylight penetrates the interior spaces, light-colored walls and building materials help 'bounce' the light rays deep into the large floor plates. Additionally, closed offices are moved to the building core and modular systems furniture is designed with vision glass and lower partition heights.

Lighting Technologies.

- All closed offices and utility rooms are equipped with adjustable motion sensors that automatically turn lights on and off.
- Suspended direct-indirect lighting fixtures with T-8 lamps are used throughout the open office areas. Most of the fluorescent light is projected up at the ceiling tiles where their highly-reflective properties work in unison to evenly 'wash' the spaces with light.
- Perimeter dimming controls lower the artificial lighting levels during the times of day when natural light is abundant and electrical loads are at their peak.
- Task lighting is provided at each work station with a power strip equipped with a motion sensor that automatically turns off after a period of inactivity.